```
Set     Items   Description
S1      44949   (FINGER OR THUMB OR PALM)()PRINT? OR FINGERPRINT? OR THUMB-
             PRINT? OR PALMPRINT?
S2   16813036   SELECT? OR SOME OR INDIVIDUAL? OR SEVERAL? OR MULTIPL? OR -
             ONLY OR LIMIT? OR FIVE OR SIX OR SEVEN OR EIGHT OR NINE
S3    4014695   USER? OR INDIVIDUAL? OR CUSTOMER? OR PERSON? OR EMPLOYEE?
S4      47300   S3(3N)(SELECT? OR CHOOSE? OR DECIDE?)
S5       5523   S1(2N)(IDENTIF? OR ID OR NUMBER? OR NAME? OR ALIAS?)
S6         15   S5 AND S4
S7         15   S6 AND S2
S8       2908   S1(3N)(MULTIPL? OR SEVERAL? OR MORE()THAN()ONE OR PLURAL? -
             OR TWO OR THREE OR FOUR OF FIVE OR SIX OR SEVEN OR EIGHT OR N-
             INE OR MANY OR VARIOUS OR DIFFERENT)
S9          1   S3(2N)(SELECT? OR CHOOSE? OR DECIDE?) AND S5 AND S8
S10         0   S9 NOT S7
S11       497   S5 AND S8
S12       173   S11 AND S3
S13       172   S12 NOT S7
S14         7   S1(3N)(ID OR IDENTIFIER? OR NUMBER? OR NUMERAL? OR NAME? OR
              ALIAS)(3N)(LINK? OR ASSOCIAT? OR COMBINE?)
S15         0   S1(2N)(NUMBERING? OR ASSIGN(N)NUMBER?)
S16       723   S1(2N)(NUMBER? OR NUMERAL?)
S17       103   S5(S)S8(S)S3
S18       125   S17 OR S14 OR S9 OR S7 OR S6
S19        77   RD (unique items)
S20        51   S19 NOT PY>2000
S21        51   S20 NOT PD=20000531:20020531
S22        51   S21 NOT PD=20020531:20040601
File   8:Ei Compendex(R) 1970-2004/May W1
         (c) 2004 Elsevier Eng.  Info. Inc.
File  35:Dissertation Abs Online 1861-2004/Apr
         (c) 2004 ProQuest Info&Learning
File  65:Inside Conferences 1993-2004/May W2
         (c) 2004 BLDSC all rts. reserv.
File   2:INSPEC 1969-2004/May W1
         (c) 2004 Institution of Electrical Engineers
File  94:JICST-EPlus 1985-2004/Apr W3
         (c)2004 Japan Science and Tech Corp(JST)
File 111:TGG Natl.Newspaper Index(SM) 1979-2004/May 14
         (c) 2004 The Gale Group
File 233:Internet & Personal Comp. Abs. 1981-2003/Sep
         (c) 2003 EBSCO Pub.
File   6:NTIS 1964-2004/May W2
         (c) 2004 NTIS, Intl Cpyrght All Rights Res
File 144:Pascal 1973-2004/May W1
         (c) 2004 INIST/CNRS
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File  34:SciSearch(R) Cited Ref Sci 1990-2004/May W2
         (c) 2004 Inst for Sci Info
File  62:SPIN(R) 1975-2004/Mar W3
         (c) 2004 American Institute of Physics
File  99:Wilson Appl. Sci & Tech Abs 1983-2004/Apr
         (c) 2004 The HW Wilson Co.
File  95:TEME-Technology & Management 1989-2004/Apr W4
         (c) 2004 FIZ TECHNIK
```

22/5/1 (Item 1 from file: 8)
DIALOG(R)File 8:Ei Compendex(R)

06001896 E.I. No: EIP02066850073
Title: A novel fingerprint image sensing device and recognition algorithm for sensed fingerprint image
Author: Arai, Fumihito; Sun, Zimin; Tsuruno, Jiro; Fukuda, Toshio
Corporate Source: Dept. of Micro System Engineering Nagoya University, Chikusa-Ku, Nagoya 464-8603, Japan
Conference Title: 26th Annual Conference of the IEEE Electronics Society IECON 2000
Conference Location: Nagoya, Japan Conference Date: 20001022-20001028
E.I. Conference No.: 58967
Source: IECON Proceedings (Industrial Electronics Conference) v 3 2000. p 2183-2188 (IEEE cat n 01CB37141)
Publication Year: 2000
CODEN: IEPREA
Language: English
Document Type: CA; (Conference Article) Treatment: A; (Applications)
Journal Announcement: 0202W2
Abstract: A novel **fingerprint** image sensing device, which **combines** the **ID** bar code technique with **fingerprint** , has been proposed and developed. Due to the use of ID bar code, higher security and less recognition time can be ensured. The device has been fabricated using a new micromachining technology. The sensed image with this sensing device consists of both fingerprint patterns and ID bar lines. The corresponding recognition algorithm for the sensed fingerprint image has also been researched and developed. The algorithm extracts an ID bar image and a pure fingerprint image without ID bar lines from the single sensed image. The ID code can be extracted from the ID bar image, and the fingerprint image is processed to realize the fingerprint identification. 8 Refs.
Descriptors: *Object recognition; Electronic document identification systems; Bar codes; Security of data; Algorithms; Pattern matching
Identifiers: Fingerprint image sensing device; Recognition algorithm; Senses fingerprint image
Classification Codes:
723.5 (Computer Applications); 723.2 (Data Processing)
723 (Computer Software, Data Handling & Applications)
72 (COMPUTERS & DATA PROCESSING)

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Set     Items   Description
S1      11212   (FINGER OR THUMB OR PALM)()PRINT? OR FINGERPRINT? OR THUMB-
             PRINT? OR PALMPRINT?
S2    3945216   SELECT? OR SOME OR INDIVIDUAL? OR SEVERAL? OR MULTIPL? OR -
             ONLY OR LIMIT? OR FIVE OR SIX OR SEVEN OR EIGHT OR NINE
S3    1107891   USER? OR INDIVIDUAL? OR CUSTOMER? OR PERSON? OR EMPLOYEE?
S4      47921   S3(3N)(SELECT? OR CHOOSE? OR DECIDE?)
S5       2316   S1(2N)(IDENTIF? OR ID OR NUMBER? OR NAME? OR ALIAS?)
S6         27   S5 AND S4
S7         23   S6 AND S2
S8        515   S1(3N)(MULTIPL? OR SEVERAL? OR MORE()THAN()ONE OR PLURAL? -
             OR TWO OR THREE OR FOUR OF FIVE OR SIX OR SEVEN OR EIGHT OR N-
             INE OR MANY OR VARIOUS OR DIFFERENT)
S9           3   S3(2N)(SELECT? OR CHOOSE? OR DECIDE?) AND S5 AND S8
S10          0   S9 NOT S7
S11        106   S5 AND S8
S12         65   S11 AND S3
S13         17   S12 AND IC=(G06F? OR H04L?)
S14         14   S13 NOT S7
S15         12   S1(3N)(ID OR IDENTIFIER? OR NUMBER? OR NUMERAL? OR NAME? OR
              ALIAS)(3N)(LINK? OR ASSOCIAT? OR COMBINE?)
S16         11   S15 NOT (S14 OR S7)
S17          0   S1(2N)(NUMBERING? OR ASSIGN(N)NUMBER?)
S18        162   S1(2N)(NUMBER? OR NUMERAL?)
S19         28   S18 AND S8
S20          9   S19 NOT (S7 OR S16) AND IC=(G06F? OR H04L?)
File 347:JAPIO Nov 1976-2003/Dec(Updated 040402)
         (c) 2004 JPO & JAPIO
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200430
         (c) 2004  Thomson Derwent
```

20/5/4 (Item 4 from file: 347)
DIALOG(R)File 347:JAPIO

02507268 **Image available**
TRANSACTION PROCESSOR

PUB. NO.: 63-124168 [JP 63124168 A]
PUBLISHED: May 27, 1988 (19880527)
INVENTOR(s): TAKEBAYASHI HAJIME
NOJIMA YOICHI
APPLICANT(s): OMRON TATEISI ELECTRONICS CO [000294] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 61-270609 [JP 86270609]
FILED: November 13, 1986 (19861113)
INTL CLASS: [4] **G06F-015/30** ; G07D-009/00
JAPIO CLASS: 45.4 (INFORMATION PROCESSING -- Computer Applications); 29.4 (PRECISION INSTRUMENTS -- Business Machines)
JAPIO KEYWORD: R087 (PRECISION MACHINES -- Automatic Banking)
JOURNAL: Section: P, Section No. 768, Vol. 12, No. 377, Pg. 166, October 07, 1988 (19881007)

ABSTRACT

PURPOSE: To enable >=2 persons to share an account via a family card, etc., in accordance with demand of the account owner by providing **plural fingerprint** collation data memory areas to store the identification numbers and the collation data in pairs into a fingerprint data file.

CONSTITUTION: A fingerprint data file 30 contains an area m(sub 1) where an account number is stored for each account, an area m(sub 2) where the number of registered data is stored, and **plural fingerprint** collation data memory areas m(sub 3-1)-m(sub 3-3) where the identification **numbers** and the **fingerprint** collation data are stored in pairs. In a fingerprint collation mode, the fingerprints of transactors are read by a fingerprint reader and collated with the corresponding fingerprint data. That is, the fingerprint data of the areas m(sub 3-1)-m(sub 3-3) are read out and collated with the fingerprints of the transactors. When coincidence is obtained from said collation, the corresponding individual collation data are registered and the transaction processing is carried out. Thus >=2 persons can share an account by means of a family card, etc., in accordance with the demand of the account owner by using plural memory areas to store the fingerprint collation data.

7/5/23 **(Item 15 from file: 350)**
DIALOG(R)File 350:Derwent WPIX

003305364
WPI Acc No: 1982-F3375E/198218
Personal card identification system - has grid of identifier **symbols representing** fingerprint **characteristics for electronic conversion**
Patent Assignee: ESTRADA C I (ESTR-I)
Inventor: ESTRADA C I
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 4325570	A	19820420				198218 B

Priority Applications (No Type Date): US 80146484 A 19800505
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 4325570	A		5		

Abstract (Basic): US 4325570 A

The system is used for **individuals** and provides a three point identification check at point-of-transaction to assure accuracy. The system utilises an **individual fingerprint** and an **identifier** which can be correlated to the fingerprint and to a listing of valid identifiers. An identification card is used which has the **individual** 's fingerprint, a grid superimposed over the **fingerprint** , and an **identifier** printed upon it.

The identifier is made-up of a series of **individual** designations or symbols, with each **individual** designation representing a **selected** fingerprint characteristic in respective squares of the grid. A data bank for **individuals** in the system contains a listing of valid identifiers for correlation and validation purposes. The identifier may be made up of alpha, numeric, or alpha numeric designations.

1

Title Terms: PERSON; CARD; IDENTIFY; SYSTEM; GRID; IDENTIFY; SYMBOL; REPRESENT; FINGERPRINT; CHARACTERISTIC; ELECTRONIC; CONVERT
Derwent Class: P76; T04; T05; T06
International Patent Class (Additional): B42D-015/00; G06K-009/00
File Segment: EPI; EngPI

14/5/6 (Item 6 from file: 347)
DIALOG(R)File 347:JAPIO

02683470 **Image available**
PERSONAL IDENTIFYING DEVICE USING **FINGERPRINT**

PUB. NO.: 63-300370 [JP 63300370 A]
PUBLISHED: December 07, 1988 (19881207)
INVENTOR(s): GOTOU YUKARI
APPLICANT(s): MITSUBISHI ELECTRIC CORP [000601] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 62-136105 [JP 87136105]
FILED: May 30, 1987 (19870530)
INTL CLASS: [4] G06K-009/00; **G06F-015/62**
JAPIO CLASS: 45.3 (INFORMATION PROCESSING -- Input Output Units); 45.4 (INFORMATION PROCESSING -- Computer Applications)
JOURNAL: Section: P, Section No. 850, Vol. 13, No. 131, Pg. 33, March 31, 1989 (19890331)

ABSTRACT

PURPOSE: To identify a **person** whose fingerprints are registered with high accuracy by storing the fingerprint data memory of a **fingerprint** collator with **plural fingerprint** data corresponding to identification numbers.
CONSTITUTION: The fingerprint data memory 18 of the fingerprint collator 16 is stored with **plural fingerprint** data corresponding to **identification numbers** . **Fingerprint** data read by a fingerprint data input device 10 corresponding to an identification number is collated with the **plural fingerprint** data registered in the fingerprint data memory 18 corresponding to the identification numbers previously to identify the **person** himself. Consequently, a **personal identifying** device using **fingerprints** is obtained which can **identifies persons** whose **fingerprints** are registered with high accuracy (identification rate).

02503485 **Image available**
FINGERPRINT COLLATING DEVICE

PUB. NO.: 63-120385 [JP 63120385 A]
PUBLISHED: May 24, 1988 (19880524)
INVENTOR(s): NOJIMA YOICHI
APPLICANT(s): OMRON TATEISI ELECTRONICS CO [000294] (A Japanese Company or Corporation), JP (Japan)
APPL. NO.: 61-266346 [JP 86266346]
FILED: November 08, 1986 (19861108)
INTL CLASS: [4] G06K-009/00; **G06F-015/62**
JAPIO CLASS: 45.3 (INFORMATION PROCESSING -- Input Output Units); 45.4 (INFORMATION PROCESSING -- Computer Applications)
JOURNAL: Section: P, Section No. 767, Vol. 12, No. 370, Pg. 35, October 05, 1988 (19881005)

ABSTRACT

PURPOSE: To smoothly collate plural fingers by only giving one registration number to a specific **person** , by storing in advance **fingerprint** patterns of **plural** **different** fingers, and collating them with a fingerprint pattern which is read.

CONSTITUTION: A CPU 6 receives an input of a registration number, and when the registration number is inputted from a ten-key 3, the CPU retrieves a registration pattern file 7 and retrieves whether a data discriminated by the registration number concerned exists or not. Subsequently, the number of registration patterns thereof is read out of the file 7, (m) for showing the **number** of **fingerprint** patterns which are read for a collation is set to '1', and a fingerprint pattern of a **person** to be discriminated is read from a reader 2. Next, (n) for showing the number of registration patterns which are read out of the file 7 is set to '1', and the n-th registration pattern is read out, and collated with the fingerprint pattern which is read. Thereafter, the result of collation is decided, and at the time of coincidence, a fact that both of them made coincide is displayed on a CRT 5.

14/5/12 **(Item 3 from file: 350)**
DIALOG(R)File 350:Derwent WPIX

015387312 **Image available**
WPI Acc No: 2003-448257/200342
Related WPI Acc No: 2003-811605
XRPX Acc No: N03-357565

Fingerprint authorization method for financial transactions, involves comparing input fingerprint sample with fingerprint templates selected based on input fingerprint identification **code and ID code stored in database**

Patent Assignee: ROBINSON T (ROBI-I)
Inventor: ROBINSON T
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20030061172	A1	20030327	US 2001324229	P	20010921	200342 B
			US 2002251305	A	20020920	

Priority Applications (No Type Date): US 2001324229 P 20010921; US 2002251305 A 20020920
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20030061172	A1		32	G06F-017/60	Provisional application US 2001324229

Abstract (Basic): US 20030061172 A1

NOVELTY - The **fingerprint identification** (**ID**) code input by an **user** and the ID code stored in the central database, are compared based on which **several** matching **fingerprint** templates are selected from the central database. The selected fingerprint templates are compared with the input fingerprint sample, for authenticating further transaction.

USE - For authorizing fingerprint to authenticate financial transactions.

ADVANTAGE - As the matching function is distributed to several local devices, workload on the database is reduced and hence efficient and inexpensive transactions are performed, without using any identity verification tokens.

DESCRIPTION OF DRAWING(S) - The figure shows a general architecture of the fingerprint authorization system.

pp; 32 DwgNo 1/12

Title Terms: FINGERPRINT; AUTHORISE; METHOD; FINANCIAL; TRANSACTION; COMPARE; INPUT; FINGERPRINT; SAMPLE; FINGERPRINT; TEMPLATE; SELECT; BASED ; INPUT; FINGERPRINT; IDENTIFY; CODE; ID; CODE; STORAGE; DATABASE
Derwent Class: S05; T01; T04; T05
International Patent Class (Main): **G06F-017/60**
File Segment: EPI